

SCOPE OF CLAIMS

1. A cover member for a push-button switch comprising a hard base and a keypad,

wherein the hard base is made of a hard resin with a through hole for a key top, and

wherein the keypad is made of a silicone rubber film, a front surface of the keypad is in contact with an entire back surface of the hard base, the keypad is exposed through the through hole, and a back surface of the keypad corresponding to the through hole is provided with a press projection for pressing a contact point.

2. The cover member for the push-button switch according to Claim 1, wherein a portion of the keypad exposed through the through hole of the hard base forms the key top.

3. The cover member for the push-button switch according to Claim 1, wherein the front surface of the keypad exposed through the through hole of the hard base is provided with the key top made of a hard resin.

4. The cover member for the push-button switch according to any one of Claims 1 to 3, wherein the hard base is made of a polycarbonate resin, and

wherein the silicone rubber film is made of a selectively adhesive silicone rubber containing an additive of an auxiliary agent to be chemically bonded to the polycarbonate resin.

5. The cover member for the push-button switch according to any one of Claims 1 to 4, wherein a groove is formed between said through holes adjacent to each other on the back side of the hard base.

6. The cover member for the push-button switch according to any one of Claims 1 to 5, wherein the hard base is made of an optically transparent resin.

7. A method of producing the cover member for the push-button switch as defined in Claim 1 or 2, the method comprising the steps of:

inserting the hard base preliminarily shaped and decorated, in a mold; and

thereafter filling the mold with a silicone rubber containing a component highly adhesive to the hard base, and heating and curing the silicone rubber, thereby integrating the hard base and the keypad.

8. A method of producing the cover member for the push-button switch as defined in Claim 3, the method comprising the steps of:

inserting the hard base preliminarily shaped and decorated, in a mold;

thereafter filling the mold with a silicone rubber containing a component highly adhesive to the hard base, and heating and curing the silicone rubber, thereby integrating the hard base and the keypad; and

thereafter bonding and fixing the key top to the front surface of the keypad exposed through the through hole of the hard base.

9. The production method of the cover member for the push-button switch according to Claim 7 or 8, wherein the hard base is made of a polycarbonate resin, and

wherein the silicone rubber film is made of a selectively adhesive silicone rubber containing an additive of an auxiliary agent to be chemically bonded to the polycarbonate resin.

10. The production method of the cover member for the push-button switch according to Claim 9, wherein a heating temperature in the heating step is not less than a temperature necessary for curing the selectively adhesive silicone rubber and not more than a deflection temperature under load of the hard base.

11. The production method of the cover member for the push-button switch according to any one of Claims 7 to 10, wherein the mold in which the hard base is inserted, is a movable mold opposed to a fixed mold having a gate for injection of a material, and

wherein after the step of integrating the hard base and the keypad, the movable mold is moved, and the integrated hard base and keypad attached to the movable mold are detached therefrom.